Five Year Review Report

Skinner Landfill Site West Chester, Ohio

Pursuant to CERCLA

Prepared by:
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Date

I. Introduction

A. Authority and Purpose

Section 121(c) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended by SARA and Section 300.430(f) (4) (ii) of the National Contingency Plan (NCP), require that periodic (no less often than five years) reviews are to be conducted for sites where hazardous substances, pollutants, or contaminants remain at the site above levels that will not allow for unlimited use or unrestricted exposure following the completion of remedial actions for the site. The purpose of a statutory five-year review is to evaluate whether the remedial action remains protective of human health and the environment. This review focuses on the protectiveness of the Skinner Landfill Superfund Site, located in West Chester, Ohio. The review will be placed in the Site files and local repository(s) for the Skinner Landfill Superfund Site in Butler County, Ohio.

The United States Environmental Protection Agency (U.S. EPA) has established a three-tier (with a sub-tier for Tier I, as Ia) approach to conducting Five-Year Reviews, the most basic of which provides a minimum protectiveness evaluation for sites with on-going response actions at the site (Level Ia review). U.S. EPA contemplates that a Level I review will be appropriate in all but relatively few cases where site-specific considerations suggest otherwise. The second and third levels (Level II and III) of review are intended to provide the flexibility to respond to varying site-specific considerations, employing further analysis. Site specific considerations, including the nature of the response action, the status of the on-site response activities, and the proximity to populated areas and sensitive environmental areas determine the level of review for a given site. The Type Ia review conducted for this site is applicable to a site at which response is ongoing.

B. Site History

The Skinner Landfill site is located in West Chester, an unincorporated area in Section 22 of Union Township, Butler County, Ohio. The Skinner site is comprised of approximately 78 acres of hilly terrain. The site is bordered on the east by Conrail railroad tracks. Land use in the immediate site vicinity includes business and residential uses to the west and crop farming to the north. Cincinnati-Dayton Road borders the site to the west. The East Fork of Mill Creek runs through the southern portion of the site. Approximately 6800 people live within 1 mile of the site.

The site was used in the past for the mining of sand and gravel, and was operated for the land-filling of a wide variety of materials from approximately 1934 through 1990. Materials deposited at the site include demolition debris, household refuse, and a wide variety of chemical wastes. A low area in the center of the site, referred to as the waste lagoon, was used for the disposal of paint wastes, ink wastes, creosote, pesticides, and other chemical wastes.

Elevations at the site range from a high of nearly 800 feet above Mean Sea Level to the northeast, sloping generally southwestward, to a low of 645 feet near the confluence of Skinner Creek and the East Fork of Mill Creek. Several geologic units which underlie the site are used locally as aquifers. Groundwater at the site is contained in either the glacial drift aquifer or the bedrock aquifer.

II. Discussion

A. Remedial Objectives and Activities

The U.S. EPA organized the remedial action at the Skinner site into two phases, or "operable units." The first operable unit was an interim action to protect human health from any potential immediate risks. This was achieved by fencing the contaminated portions of the site to limit site access, to prevent ingestion of or direct contact with contaminated soils. The Interim Action also included a provision of an alternate potable water supply to potentially affected downgradient users of groundwater, and groundwater monitoring, to protect the potentially affected users of groundwater on and near the site. The Record of Decision (ROD) for the first Operable Unit Interim Action was signed by the U.S. EPA Regional Administrator on September 30, 1992. A Unilateral Administrative Order (UAO) for the implementation of the first operable unit was issued to 20 Potentially Responsible Parties (PRPs) on December 9, 1992. Several PRPs organized as the Skinner Landfill PRP Group and expressed their intent to comply with the UAO, and have performed the work required under the UAO. Several other PRPs stated that they would not comply with the UAO.

The second operable unit addresses potential future migration of site contaminants into the groundwater and will limit the potential for direct exposure of site contaminants to humans through source control measures. The ROD for the second and final operable unit was signed by the U.S. EPA Regional Administrator on June 4, 1993. The selected remedy included the following:

- construction of a RCRA cap over the waste materials:
- interception, collection, and treatment of contaminated groundwater;
- diversion of upgradient groundwater flow (deferred pending post-cap construction monitoring of water table lowering);
- monitoring;
- institutional controls: and
- soil vapor extraction (found to be infeasible)

An Administrative Order by Consent (AOC) for the remedial design of the second operable unit was completed on March 29, 1994. The Skinner Landfill PRP Group, consisting of 7 parties, agreed to complete the remedial design. The remedial design was approved by the U.S. EPA on June 18, 1996.

On January 8, 1997, U.S. EPA sent general notice letters, inviting parties which the Agency considered to be PRPs at the Skinner Site to participate in an alternative dispute resolution (ADR) allocation procedure in order to allocate responsibility for clean-up costs at the Site. At about the same time that U.S EPA sent notice of the initiation of the ADR allocation procedure, the AOC Respondents filed a contribution lawsuit against most of the parties which were recipients of the January 8, 1997 letter, as well as certain municipalities. Although the ADR allocation process was initiated and convened by the U.S. EPA, the Agency was not a party to the allocation.

In October 1998, John Barkett, the third-party neutral, issued a report setting forth his preliminary allocation of responsibility for the Skinner Site. Mr. Barkett is expected to issue a final allocation of responsibility for environmental response costs at Skinner.

RA Negotiations began on February 23, 1999.

Activities for Sta-Completion.

U.S. EPA, perhaps in conjunction with the State of Ohio, is planning to conduct the following additional response activities at the Site:

- (1) Implementation of the Remedial Design prepared by the AOC Respondents and approved by the U.S. EPA for the Site; and
- (2) Provision of any monitoring, and operation and maintenance necessary at the Site after the remedial action is completed.

In addition to those response actions enumerated above, U.S. EPA may, pursuant to its authorities under CERCLA and other laws, decide that other clean-up activities are necessary to protect public health, welfare and the environment.

III. Recommendations.

I recommend that the approved Remedial Design be implemented, as well as continue on-going groundwater monitoring at the Site. Also, complete any operation and maintenance necessary after the remedial action.

IV. Statement of Protectiveness.

I certify that the remedies selected for this site will be protective of human health and the environment

V. Next Five-Year Review.

The next five-year review will be conducted by March 30, 2003.